**IN THE UNITED STATES PATENT OFFICE**

| | |
|---|---|
| APPLICANT: | Martin Kleban ET AL. |
| SERIAL NO.: | 09/975,787 |
| FILED: | November 11, 2001 |
| TITLE: | Microcapsules having Polyurea Walls |

# DECLARATION

I, Günter Klug, declare:

that I am a German citizen resident at Rietherbach 18, 40764 Langenfeld, Germany;

that I am a chemist having graduated with a degree of Doctor rer. nat. from the University of Würzburg, Germany in 1984

that I have since then been concerned with the manufacturing and selling of organic dyestuffs;

that I am one of the joint inventors of US Patent Application Serial No. 09/975,787 filed November 11, 2001;

that I have read the Office Action of November 25, 2003 and the references cited therein;

that the following tests were made under my supervision.

A) A microcapsule dispersion was produced in accordance with Example 10 of U.S. Patent 5,635,211 (= counterpart of EP-A-727,251) using guanidine as sole crosslinker.

B) Invention

Corresponding microcapsules according to the invention were produced under identical conditions as in Example 1 a using guanidine carbonate as crosslinker instead of guanidine (guanidine and guanidine carbonate will give the same endproduct respectively but guanidine carbonate is more conveniently used in the reaction), and the two types of capsule were compared with regard to their properties (see Table 1). The NCO content in A) and B) is 21,6 % and the isocyanurate content 96,9 %, based on polyisocyanate used. Of that, hexamethylene diisocyanurate trimer accounts for > 45 % by weight and higher oligomers account for > 30 % by weight.

Table 1

| Ex. | Type | Crosslinker | Wallfraction ** (%) | Aging characteristics Intensity of copy after aging * | |
|---|---|---|---|---|---|
| | | | | Starting value | 6 days; 70 °C; 75 % rel. humidity |
| A | Comparison | Guanidine | 10 | 53,0 | 46,2 |
| B | Invention | Guanidine carbonate | 4 | 52,7 | 49,0 |

* Aging is assessed by comparing the copies of appropriately aged CB (coated back) paper with the copy of the unaged CB paper as a reference. The higher the numerical value, the higher the intensity of the copy.

** Corresponds to polyisocyanate content in oil phase.

Result

The microcapsules according to the invention exhibit substantially better aging characteristics than those of the prior art, despite the substantially reduced wall fraction.

Conclusion

The aging characteristic of microcapsules containing paper is an important property. It was quite unexpected that the microcapsules of the present invention exhibits better aging properties than those of the prior art.

The undersigning declarant declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 23.03.04

Signature:

Günter Klug

C:\DOKUME~1\bkgg\LOKALE~1\Temp\C.Programme.Notes.Data\25766\34705usd.doc